GPS Solution using external GPS LNA and no GPS IF filter

Note all detail shown - eg LNA gain step etc.

For PCS the VCO operates on 2143MHz
For GPS the VCO operates on1391MHz
For Cellular the VCO operates on 2143MHz but with divide by 2 in line

LO signal to TX
Up converter

FM Input

IFR3000

CDMA Input

183.6MHz FM Filter

183.6MHz CDMA Filter

GPS Signal passes thru' RX IC
Cell mixer & CDMA IF filter

LO Buffer or Divide by 2

Cell CDMA Mixer

Cell FM Mixer

PCS Mixer

Dual Band VCO 1391/ 2143MHz

Green represents functionality within the RX IC

This switch will become a diplexer

GPS RF Filter

CELL RF Filter

PCS RF Filter

GPS LNA Located at Antenna

CELL LNA

PCS LNA

GPS Antenna

From Duplexer

From Duplexer